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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/034,976 | 12/21/2001 | D. Clint Seward | 050676.1006-103 | 2543 |

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| EXAMINER | |
|---|---|
| QUARTERMAN, KEVIN J | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2879 | |

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/034,976 | SEWARD, D. CLINT | |
| | Examiner | Art Unit | |
| | Kevin Quarterman | 2879 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *0204*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Priority*

1. The current status of the nonprovisional parent application should be included in the reference to the prior application in the first sentence of the specification.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The following title is suggested: --PROPULSION SYSTEM WITH TOROIDALLY SHAPED CONTAINMENT SYSTEM--.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Aston (US 5646476).

6. Regarding independent claim 1, Figure 1A of Aston shows a propulsion system comprising a toroidally shaped charged particle containment system; a propellant injection port (33); a propellant ionizer (14); and an exhaust port (37).

7. Regarding claim 2, Aston discloses the injection portion comprising a gas injection port (col. 4, ln. 62).

8. Regarding claim 3, Aston discloses a plurality of electrons stored in the containment system (col. 6, ln. 14-17).

9. Regarding claim 4, Aston discloses that the containment system is positively charged (col. 5, ln. 44-50).

10. Regarding claim 5, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.

11. Regarding claim 6, the propellant of Aston inherently comprises air, since Aston discloses that the propulsion system is intended for atmospheric use (col. 9, ln. 32-58).

12. Regarding claim 7, the propellant of Aston comprises a fluid (gas).

13. Regarding independent claim 8, Figure 1A of Aston shows a propulsion system comprising a cylindrical electron containment system, the system containing a plurality of electrons circulating in a toroidal shape (col. 6, ln. 14-17); a propellant injection port (33) on the system; and an exhaust port (37) on the system.

14. Regarding claim 9, Figure 1A shows the containment system comprising a toroidally shaped housing.

15. Regarding claim 10, Aston discloses a plurality of electrons stored in the containment system (col. 6, ln. 14-17).

16. Regarding claim 11, Aston discloses that the containment system is positively charged (col. 5, ln. 44-50).

17. Regarding claim 12, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.

18. Regarding claim 13, the propellant of Aston inherently comprises air, since Aston discloses that the propulsion system is intended for atmospheric use on the ground (col. 9, ln. 32-58).

19. Regarding claim 14, the propellant of Aston comprises a fluid (gas).

20. Regarding independent claim 15, Figure 1A of Aston shows a propulsion system comprising an electron containment system housing; an air inlet port (33) on the housing; a plurality of electrons in the housing that are capable of heating air flowing through the housing during ground use (col. 6, ln. 14-17); and an exhaust port (37) on the housing.

21. Regarding claim 16, Figure 1A shows the containment system comprising a toroidally shaped housing.

22. Regarding claim 17, Aston discloses that the containment system is positively charged (col. 5, ln. 44-50).

23. Regarding claim 18, Figure 1A of Aston shows a chamber having the injection port on one side and the exhaust port on the opposite side.

24. Regarding claim 19, Aston discloses a magnetic field within the housing that contains the electrons (col. 6, ln. 14-17).

25. Regarding claim 20, Figure 1A of Aston shows the housing comprising a dielectric material (43).

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman
Examiner
Art Unit 2879

kq
5 February 2005

**Joseph Williams**
**Primary Examiner**
**Art Unit 2879**